JOURNAL OF
BIOMEDICAL
MATERIALS
RESEARCH
PART B: APPLIED BIOMATERIALS
Volumes 69 Contents 2004

Contents

April 15, 2004
Volume 69B
Number 1

1 Protein-Loaded Bioresorbable Fibers and Expandable Stents: Mechanical Properties and Protein Release
Meital Zilberman, Nathan D. Schwade, and Robert C. Eberhart
Published online 17 December 2003

11 Sublethal Concentrations of Au (III), Pd (II), and Ni(II) Differentially Alter Inflammatory Cytokine Secretion from Activated Monocytes
John C. Wataha, Jill B. Lewis, Keith R. Volkmann, Petra E. Lockwood, Regina L. W. Messer, and Serge Bouillaguet
Published online 17 December 2003

18 Development of a Recombinant Human Collagen-Type III Based Hemostat
C. Yang, P. Hillas, J. Tang, J. Balan, H. Notbohm, and J. Polarek
Published online 18 December 2003

25 The Effect of Six Years of Water Storage on Resin Composite Bonding to Human Dentin
Roland Frankenberger, Wolfgang O. Strobel, Ulrich Lohbauer, Norbert Krämer, and Anselm Petschelt
Published online 29 December 2003

33 Sol-Gel Preparation and *In Vitro* Test of Fluorapatite/Hydroxyapatite Films
Kui Cheng, Wenjian Weng, Haibo Qu, Piyi Du, Ge Shen, Gaorong Han, Juan Yang, and J. M. F. Ferreira
Published online 29 December 2003

38 Analysis of Cellular Morphology, Adhesion, and Proliferation on Uncoated and Differently Coated PVC Tubes Used in Extracorporeal Circulation (ECC)
Patrícia da Luz Moreira, Paula Rulf Marreco, Angela Maria Moraes, Maria Lúcia Furlan Wada, and Selma Candelária Genari
Published online 30 December 2003

46 Etched Implants: A Comparative Surface Analysis of Four Implant Systems
S. Szmukler-Moncler, T. Testori, and J. P. Bernard
Published online 30 December 2003

58 Effects of Various Sterilization Methods on the Setting and Mechanical Properties of Apatite Cement
Masaaki Takechi, Youji Miyamoto, Yukihiro Momota, Tetsuya Yuasa, Seiko Tatehara, Masaru Nagayama, and Kunio Ishikawa
Published online 6 January 2004

64 Development of Medical Guide Wire of Cu-Al-Mn–Base Superelastic Alloy with Functionally Graded Characteristics
Yuji Sutou, Toshihiro Omori, Akihisa Furukawa, Yukinori Takahashi, Ryosuke Kainuma, Kiyoshi Yamauchi, Shuzo Yamashita, and Kiyohito Ishida
Published online 3 February 2004

70 Apatite Formation on the Surface of Wollastonite/Tricalcium Phosphate Composite Immersed in Simulated Body Fluid
Xiang Huang, Dongliang Jiang, and Shouhong Tan
Published online 13 January 2004

73 The Physicochemical Properties of the Solidification of Calcium Phosphate Cement
Changsheng Liu, Yue Huang, and Jianguo Chen
Published online 13 January 2004

79 Surface Treatment of Injectable Strontium-Containing Bioactive Bone Cement for Vertebroplasty
F. Zhao, W. W. Lu, K. D. K. Luk, K. M. C. Cheung, C. T. Wong, J. C. Y. Leong, and K. D. Yao
Published online 14 January 2004

87 Hydrolytic Degradation and Cracks in Resin-Modified Glass-Ionomer Cements
Luca Fano, Vincenzo Fano, Wanyun Ma, Xiaoguang Wang, and Feng Zhu
Published online 14 January 2004

94 Transmittance of a Bioceramic Dental Restorative Material Based on Calcium Aluminate
Håkan Engqvist, Jesper Lööf, Stina Uppström, Mike W. Phaneuf, Jacob C. Jonsson, Leif Hermansson, and Nils-Otto Ahnfelt
Published online 15 January 2004

99 Effects of Neutral Sodium Hydrogen Phosphate on the Setting Property and Hemostatic Ability of Hydroxyapatite Putty as a Local Hemostatic Agent for Bone
Yukihiro Momota, Youji Miyamoto, Kunio Ishikawa, Masaaki Takechi, Tetsuya Yuasa, Seiko Tatehara, and Masaru Nagayama
Published online 15 January 2004

104 Wear-Particle–Induced Osteoclast Osteolysis: The Role of Particulates and Mechanical Strain
Robyn A. MacQuarrie, Ying Fang Chen, Chad Coles, and Gail I. Anderson
Published online 26 January 2004

May 15, 2004
Volume 69B
Number 2

113 Optimization of Bone-Tissue Engineering in Goats
Moyo C. Kruyt, Wouter J. A. Dhert, Cumhur Oner, Clemens A. van Blitterswijk, Abraham J. Verbout, and Joost D. de Bruijn
Published online 27 February 2004

121 Mechanical Strength of Laser-Welded Cobalt–Chromium Alloy
N. Baba, I. Watanabe, J. Liu, and M. Atsuta
Published online 3 February 2004

125 Resistance to Tearing of Calf and Ostrich Pericardium: Influence of the Type of Suture Material and the Direction of the Suture Line
José María García Páez, Antonio Carrera, Eduardo Jorge, Isabel Millán, Angeles Cordon, María A. Maestro, Aurora Rocha, and José Luis Castillo-Olivares
Published online 18 February 2004

135 The Effect of Dehydration History on PVA/PVP Hydrogels for Nucleus Pulposus Replacement
Jonathan Thomas, Kate Gomes, Anthony Lowman, and Michele Marcolongo,
Published online 6 February 2004

141 Effect of Slide Track Shape on the Wear of Ultra-High Molecular Weight Polyethylene in a Pin-on-Disk Wear Simulation of Total Hip Prosthesis
Vesa Saikko, Olof Calonius, and Jaakko Keränen
Published online 6 February 2004

149 Stripe Wear Rates in Alumina THR—Comparison of Microseparation Simulator Study with Retrieved Implants
Masakazu Manaka, Ian C. Clarke, Kengo Yamamoto, Takaaki Shishido, Allen Gustafson, and Atsuhiro Imakiire
Published online 27 February 2004

158 Hierarchically Biomimetic Bone Scaffold Materials: Nano-HA/Collagen/PLA Composite
S. S. Liao, F. Z. Cui, W. Zhang, and Q. L. Feng
Published online 27 February 2004

166 Long-Term Strength of Ceramics for Biomedical Applications
Yu Zhang and Brian Lawn
Published online 18 February 2004

173 Absorbable Microparticulate Cation Exchanger for Immunotherapeutic Delivery
Waleed S. W. Shalaby, Heidi Yeh, Edward Woo, Joel T. Corbett, Heidi Gray, Carl H. June, and Shalaby W. Shalaby
Published online 21 January 2004

183 Properties of Super Stainless Steels for Orthodontic Applications
Keun-Taek Oh, Young-Sik Kim, Yong-Soo Park, and Kyoung-Nam Kim
Published online 28 January 2004

195 The Effect of Cesium-Containing Leucite Additions on the Thermal and Mechanical Properties of Two Leucite-Based Porcelains
Stephen T. Rasmussen, Charles I. McLaren, and William J. O'Brien
Published online 27 February 2004

205 Migration of Polyethylene Particles Around Nonloosened Cemented Femoral Components from a Total Hip Arthroplasty—An Autopsy Study
Philippe Massin, Daniel Chappard, Brigitte Flautre, and Pierre Hardouin
Published online 9 February 2004

216 Chitosan Membrane as a Wound-Healing Dressing: Characterization and Clinical Application
Abul Kalam Azad, Niwet Sermsintham, Suwalee Chandrkrachang, and Willem Frans Stevens
Published online 9 February 2004

223 Comparative Corrosion Performance of Black Oxide, Sandblasted, and Fine-Drawn Nitinol Wires in Potentiodynamic and Potentiostatic Tests: Effects of Chemical Etching and Electropolishing
Svetlana Shabalovskaya, Gianni Rondelli, James Anderegg, J. P. Xiong, and Ming Wu
Published online 20 February 2004

232 An Experimental Analogue to Model the Fibrous Tissue Layer in Cemented Hip Replacements
Victor Waide, Luca Cristofolini, and Aldo Toni
Published online 9 February 2004

241 Alpha-Crystallin-Incorporated Collagen Matrices as an Aid for Dermal Wound Healing
M. Rafiuddin Ahmed, D. Gopinath, K. Gomathi, P. K. Sehgal, and R. Jayakumar
Published online 27 February 2004

Letters to the Editor

249 Use and Re-Use of Orthopedic Implants in Developing Countries
R. Magetsari, C. R. Hilmy, J. R. van Horn, Henk J. Busscher, G. J. Verkerke, and H. C. van der Mei
Published online 8 March 2004

251 Polydimethylsiloxane Particles Are Not Experimental In The Human Larynx
Christian Sittel
Published online 5 March 2004

254 Author Index to Volume 69B

256 Subject Index to Volume 69B

I Volume Contents